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(71) Applicant *(for all designated States except US)*: CON-FIGIT SOFTWARE APS [DK/DK]; Glentevej 67, DK-2400 Copenhagen NV (DK).

(72) Inventors; and
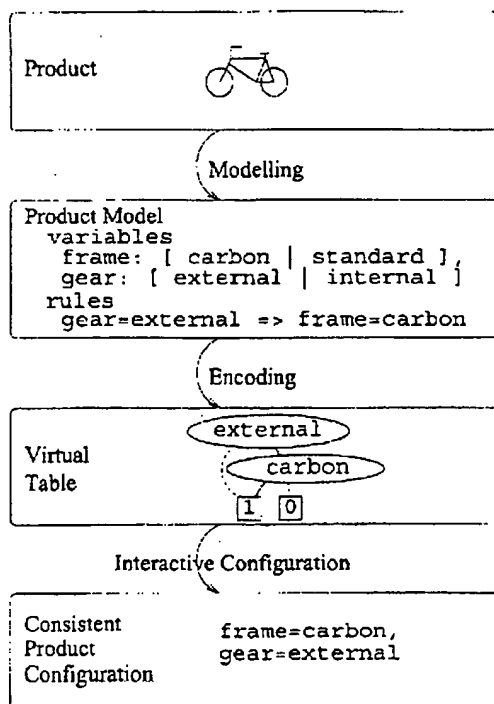(75) Inventors/Applicants *(for US only)*: LICHTENBERG,

Jakob [DK/DK]; Lindegaardsvej 12 A, 1. tv., DK-2920 Charlottenlund (DK). ANDERSEN, Henrik, Reif [DK/DK]; Klirevænget 55, DK-2880 Bagsværd (DK). HULGAARD, Henrik [DK/DK]; Koldinggade 20, 1. tv., DK-2100 Copenhagen Ø (DK). MØLLER, Jesper [DK/DK]; Frederikssundsvej 14a 4. mf., DK-2400 Copenhagen NV (DK). RASMUSSEN, Anders, Steen [DK/DK]; Nørgaardsvej 18b, 2. th., DK-2800 Lyngby (DK).

(74) Agent: PLOUGMANN & VINGTOFT A/S; Sankt Annæ Plads 11, P.O. Box 3007, DK-1021 Copenhagen K (DK).

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(54) Title: A METHOD OF CONFIGURING A PRODUCT USING A DIRECTED ACYCLIC GRAPH

(57) Abstract: A complex product is composed of several parts, where each part may depend on the other. As a consequence of these inter-dependencies, the selection of one part might exclude other parts from being included in the finished product. A *consistent configuration* is a selection of parts where all inter-dependencies are satisfied. A computer program for computer-assisted configuration helps an end-user to make choices that will lead to a consistent product. The preferred embodiment of the present invention, *Virtual Tabulation*, is a method for keeping track of inter-dependencies a large number of parts, to allow for the construction of an efficient *and* exact configuration program. Such a program allows interactive configuration over networks (e.g., the Internet). Another aspect of the invention, called *Smart Search*, allows a set of inter-dependencies among parts to be computed from a product database.

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